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ABSTRACT OF THE DISCLOSURE

There is provided a microprocessor system that can execute a specific set of instructions at a high speed while limiting the increase in size of the circuitry. The microprocessor system, which executes instructions described in a program, comprises a main processor which executes a first set of instructions by means of hardware and executes a second set of instructions by means of software and a co-processor which operates under the control of the main processor to execute the second set of instructions by means of hardware. When the co-processor encounters a specific instructions of the second set for which data under the control of the main processor needs to be operated, the co-processor issues a notification of this fact to the main processor to request it to execute the specific instruction. In this case, the co-processor updates its stack pointer and program counter by itself by means of hardware.